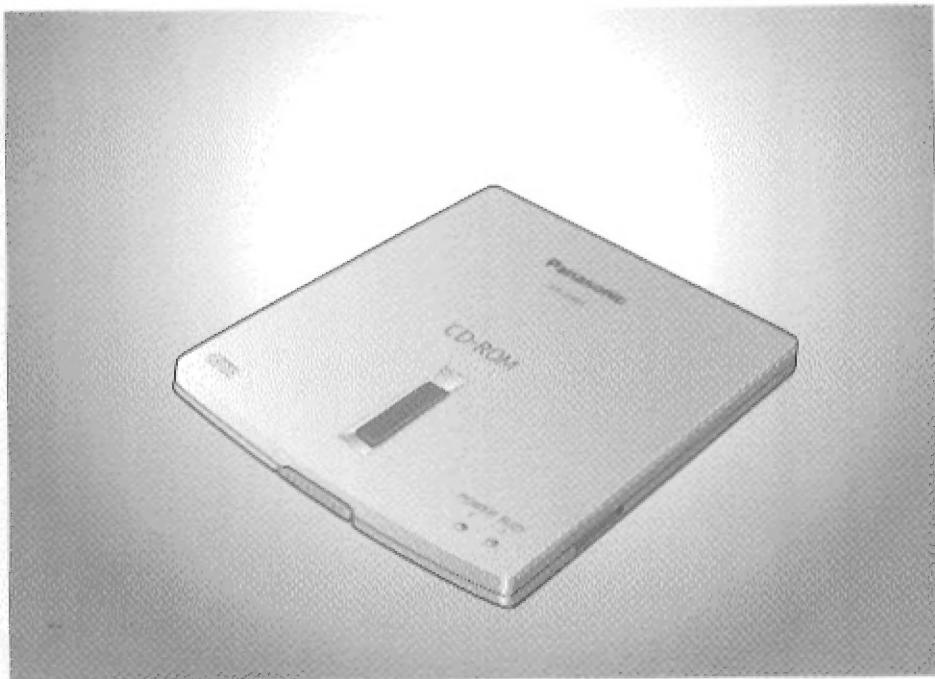


Panasonic

Portable CD-ROM Drive

Operating Instructions

Model No. **KXL-840A**



This manual contains the information on handling the drive.

Please carefully read this manual and keep the documentation in a safe place for future reference.

Thank you for purchasing the Panasonic Portable CD-ROM Drive KXL-840A.

The serial number of this unit may be found on the label located at the bottom of the unit. Write down this number below and keep this book along with your proof of purchase to serve as a permanent record of your purchase or for future reference. For warranty service you may be required to show your purchase records.

MODEL NO. KXL-840A NAME OF DEALER _____

SERIAL NO. _____ DATE OF PURCHASE _____

- Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Photo CD is a registered trademark of Eastman Kodak Company.

All other brands and product names are trademarks or registered trademarks of their respective companies.

Permission is granted from Microsoft Corporation to use Microsoft® Windows® Screen Shots.

Specifications given in this Operating Instruction are subject to change without notice.

© KYUSHU MATSUSHITA ELECTRIC CO., LTD. 2000

WARNING

- The power source voltage of the AC adaptor is listed on the nameplate.
Plug the supplied AC adaptor only into an outlet with proper voltage.
- To prevent fire or shock hazard, do not expose this product to rain or any type of moisture.

CAUTION

- When you use this equipment with the supplied AC adaptor, the main socket-outlet should be near the equipment and should be easily accessible.
- To prevent the interface connector from static electricity damage, before you touch it, discharge any static electricity from your hands by touching a grounded metal surface, such as the screw on the plate cover of an electric outlet.

CAUTION FOR LASER

This product utilizes a laser.

Use of control, adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Do not open covers and do not repair yourself. Refer servicing to qualified personnel.

Laser diode properties

Material GaAlAs

Laser output Less than HHS and IEC 60825-1 Class 1 Limit

Wavelength 785 nm

In no event will Kyushu Matsushita Electric Co., Ltd. be liable for any loss or damages to the customer's property or facilities, lost profits, lost revenue, repair costs, interruption of business, incurred expenses, inconveniences, or other incidental or consequential damages arising out of the use of or inability to use any product. Furthermore, for all cases, any compensation paid out will never exceed the original purchase price of the product.

FOR USERS IN UNITED STATES ONLY

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

FCC Warning: To assure continued FCC emission limit compliance, the user must use only the provided shield interfacing cable when connecting to a host computer. Also, any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

FCC Declaration of Conformity

Trade Name : Panasonic

Model Number : KXL-840A

Responsible Party : Matsushita Electric Corporation of America

One Panasonic Way

Secaucus, NJ 07094 U.S.A.

Telephone No. : 1-800-726-2797

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

End-User License Agreement

THIS IS A LEGAL AGREEMENT BETWEEN YOU AND PANASONIC. CAREFULLY READ ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT PRIOR TO OPENING THE PACKET OF SOFTWARE PROGRAM. OPENING THE PACKET INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS. If you do not agree to these terms and conditions, return the unopened packet and the other components of the Panasonic product to the place of purchase and your money will be refunded. No refunds will be given for product that have an opened packet or missing components.

1. COPYRIGHT:

Panasonic has the right to license or has been granted to license the enclosed software program ("SOFTWARE"), developed and copyrighted by Kyushu Matsushita Electric Co., Ltd. or its licensor ("Licensor"). You acknowledge that you are receiving only a LIMITED LICENSE TO USE the SOFTWARE and related documentation, and that you shall obtain no title, ownership nor any other rights in or to the SOFTWARE and related documentation, all of which title and rights shall remain with Licensor and Panasonic.

2. LICENSE:

(1) You have the non-exclusive right to use the one copy of the SOFTWARE on a single computer used by single user. Installation of the SOFTWARE on a network server for the purpose of distribution to one or more other computers shall not be granted in this Agreement. (2) You may not copy, reproduce, or permit to be copied or reproduced, the SOFTWARE or related documentation for any purpose, except that you may either (a) make a reasonable quantity of copies of the SOFTWARE solely for backup or archival purposes, or (b) transfer the SOFTWARE to a single hard disk, provided that you keep the original solely for backup or archival purposes. All other copies of the SOFTWARE are in violation of this Agreement. (3) You may not rent or lease the SOFTWARE, but you may transfer your right under this License Agreement on a permanent basis, provided that you transfer this Agreement, all copies of the SOFTWARE, all related documentation and your Panasonic product, and the recipient thereof agrees the terms of this Agreement. (4) You may not reverse engineer, decompile or disassemble the SOFTWARE, except that in European Union and European Free Trade Association, you may have the limited right to reverse engineer, decompile or disassemble the SOFTWARE solely to the extent specifically permitted by the terms and conditions of Article 6 of the European Community's Directive for the Legal Protection of Computer Programs, OJL 122/42 (17 May 1991). (5) You may not use, copy, modify, alter, or transfer the SOFTWARE, or any copy thereof, in whole or in part, except as expressly provided in this Agreement.

3. TERM:

This license is effective until terminated. You may terminate this Agreement at any time by destroying the SOFTWARE and related documentation and all copies thereof. This license will also terminate if you fail to comply with any term or condition of this Agreement. Upon such termination, you agree to destroy all copies of the SOFTWARE and related documentation.

4. LIMITED WARRANTY:

Within ninety (90) days of your receipt of the SOFTWARE, Panasonic warrants that the storage media on which the SOFTWARE are furnished is free from defect in materials and workmanship under normal use, and that it will repair or at its option replace any defective media at no charge to you, provided that such defective media is returned to Panasonic within such ninety (90) days period.

5. LIMITATION OF LIABILITY:

EXCEPT AS STATED ABOVE, NEITHER PANASONIC, PANASONIC'S SUPPLIER MAKES OR PASSES ON TO YOU OR OTHER THIRD PARTY, ANY WARRANTY OR REPRESENTATION INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, NEITHER PANASONIC NOR PANASONIC'S SUPPLIER WARRANTS THAT THE SOFTWARE WILL BE ERROR-FREE OR THAT IT WILL MEET YOUR REQUIREMENTS. NEITHER PANASONIC NOR PANASONIC'S SUPPLIER SHALL BE LIABLE FOR ANY DAMAGE SUFFERED BY YOU INCLUDING, BUT NOT LIMITED TO, CONSEQUENTIAL, INCIDENTAL SPECIAL OR PUNITIVE DAMAGES. THE ABOVE LIMITATIONS SHALL APPLY REGARDLESS OF THE FORM OF ACTION WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT PRODUCT LIABILITY OR OTHERWISE, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Features

■ Ultra Compact Design

- Weighs less than 8.5 ounces (approx. 240 g)
- Slim, thin design and lightweight - a truly portable CD-ROM drive

■ USB Interface is supported ^{**1}

- The supplied USB interface supports the Hot Swap function.
Without turning off your computer, the USB cable can be inserted/removed.

■ Power from USB Interface ^{**2}

- Power is supplied from your computer's USB interface so you do not need the AC adaptor to operate.

^{**1} Cannot guarantee to work with all vendors USB

^{**2} Depending on your computer, the USB interface power cannot be used,
then use the supplied AC adaptor.

Important:

■ Please use CD-ROMs
with the marking below.



■ Please use audio CDs
with the marking below.



Table of Contents

Before Use

Precautions	10
Accessories	12
Part Names	13

Preparation

MODE Switch Setting	15
Setting the Power Mode	15
System Requirements	16
Setup Your Computer	17
Installing the device driver	17
Confirmation of proper driver installation	19
Viewing the "Help" File	19

Operation

Connection	20
POWER On / Off	22
Inserting / Removing a Disc	23
Inserting a disc	23
Removing a disc	23
Reading from a CD	24
Playing a CD-ROM	24
Playing an audio CD	24
Insertion / Removal of the USB Cable	25

Appendix

Maintenance	26
Troubleshooting	27
Specifications	30
Index	32

Before Use

Preparation

Operation

Appendix

Precautions

General

- Do not disassemble the drive and do not repair yourself, or it may cause electrical shock hazard, or a laser may damage your eyes.



- Do not store or use the drive in a dusty, humid, oily environment, or under damp or moist conditions.

- Do not turn up the volume too high, when using the headphones.

- Do not leave the drive in direct sunlight, near a heat source or especially in a hot automobile.

- Do not drop or jar the drive.

- Do not touch the pins/terminals of the interface card and interface cable.

- When the drive has been moved from a cold place to warm place, it may damp or moist. Leave the drive for about 1 hour before using.

- Keep magnetic objects away from the drive.

- Do not insert any foreign metal object inside the drive.

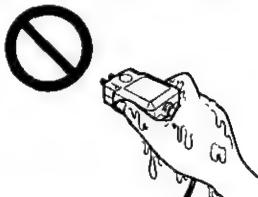
- Do not touch the lens.

- If noise is heard from radio or TV, move the drive 2 m (about 6 ft.) away from the radio or TV.

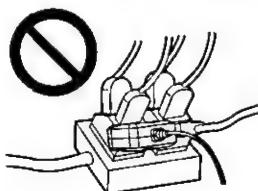
- Do not use any other interface card with the drive, except the supplied interface card.

AC Adaptor

- Do not plug-in or remove the AC adaptor using wet hands.



- Make sure the AC outlet or cord for the AC adaptor does not exceed the limit of their electrical ratings.



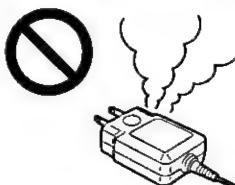
- Make sure the prongs of AC adaptor are fully inserted into the AC outlet.

- Do not damage the AC adaptor by scratching or modifying, or bending its prongs.



- Periodically remove the dust from the prongs of AC adaptor.
- Only use the AC adaptor indoors.

- Do not use the AC adaptor under the following conditions.
 - when it is damaged
 - when there is smoke or strange smell
 - when an abnormal sound is heard



- Use only the supplied AC adaptor (☞ P. 21)
- Do not disassemble the AC adaptor.

Disc

- Do not scratch, smudge, write or label both surfaces of Disc.

- Do not wipe Disc with dried hard cloth.

- Do not leave the Disc in direct sunlight, near a heat source or especially in a hot automobile.

- Do not touch the data side (the side without the label) of Disc. Avoid finger prints and scratches while holding it.

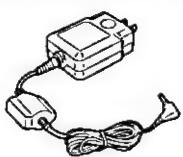
- Do not use chemicals or cleanser to clean Disc.

- Do not throw or bend Disc.

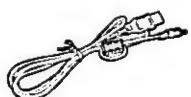
Accessories

Make sure that the following accessories are included with the drive. If anything is missing, contact your dealer immediately.

- AC Adaptor
(KX-WZ701)



- USB Cable



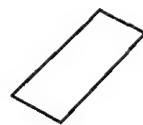
- Operating Instruction
(this manual)



- Setup Disk
[Before opening
the packet,
please read
the End-User
License
Agreement.]

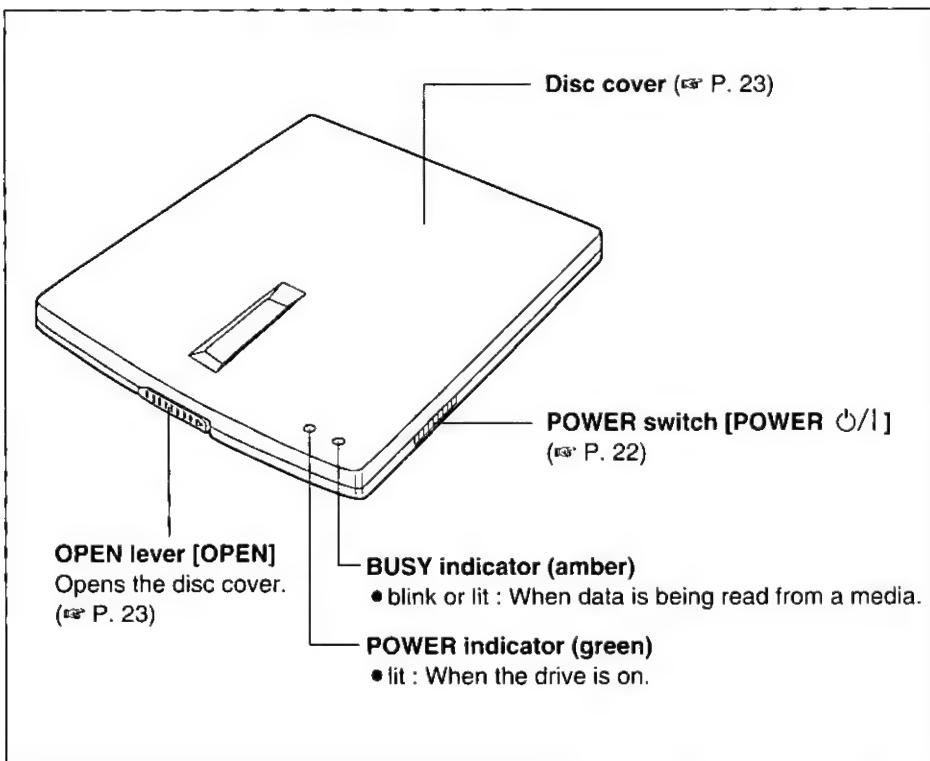


- Warranty Card



Part Names

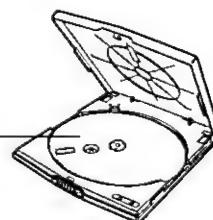
■ Front / Right Side view



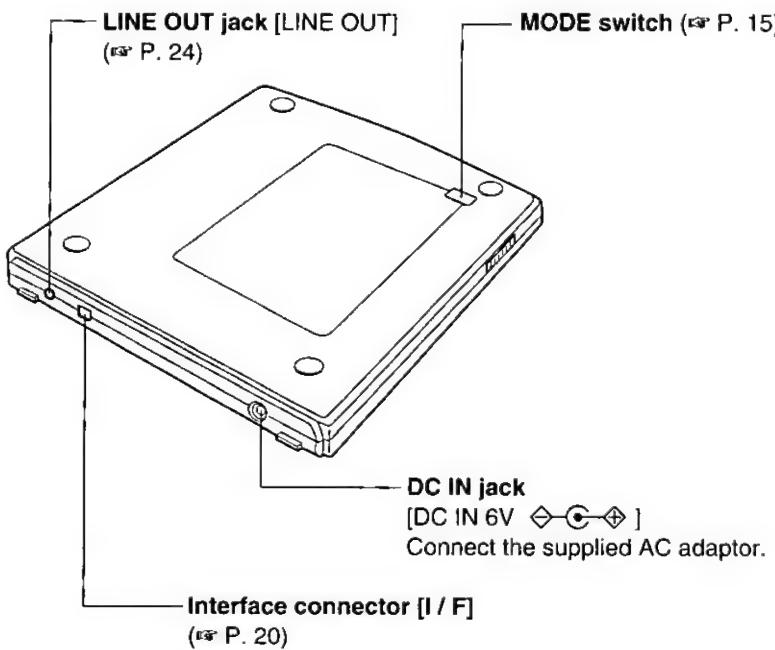
Note:

- Before using the drive,
remove the lens protection sheet.

Lens protection sheet

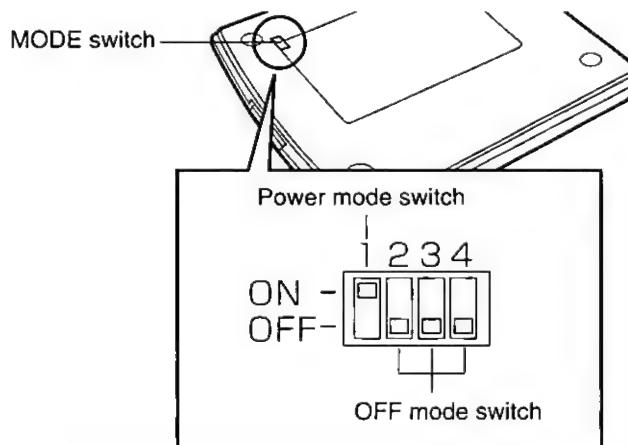


■ Rear / Bottom view



MODE Switch Setting

Before setting the MODE switch, make sure that the drive is OFF.
MODE switch allows you to set "POWER MODE" (☞ below).
Set the switch No.1 to ON or OFF using a pointed object like a pen.



Note:

- Make sure that you use the drive with MODE switches No.2 to No.4 set to OFF.

Setting the Power Mode

The factory setting is set to "ON".

MODE Switch	Setting	Description
1	ON	The drive can be used only when using the AC adaptor. (The drive cannot be used with the USB interface power.)
	OFF	The drive can be used with the power from the USB interface power. If the power can be supplied from both the AC adaptor as well as the USB interface power, the AC power has priority over the power supply from the USB interface power.

Note:

- The drive cannot be used with the power from the USB interface power, if your computer's function is not stable. In this case, connect the AC adaptor.

System Requirements

Unit^{*1}	• IBM PC/AT compatible Computer
Operating System	• Windows 98 • Windows 2000

*1 It should have an USB port.

Setup your computer, depending on which operating system your computer has.

Windows 98^{*1} (☞ P. 17)

Windows 2000^{*2} (☞ P. 17)

*1 Microsoft® Windows® 98 operating system (hereafter Windows 98)

*2 Microsoft® Windows® 2000 operating system (hereafter Windows 2000)

Setup Your Computer

Installing the device driver

■ For Windows 98 Users

To install the device driver, follow the steps below.

■ For Windows 2000 Users

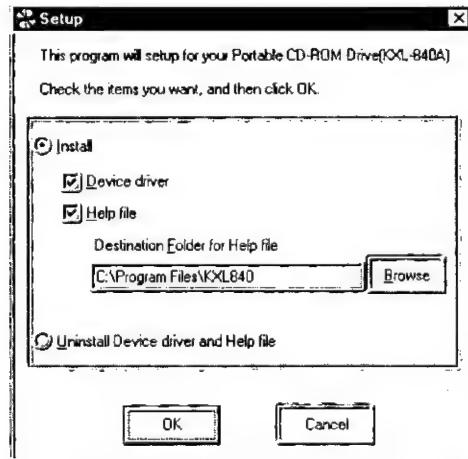
You do not need to install the device driver.
(Connect the drive to your computer directly.)

Caution:

- Please use your computer with AC power to prevent the battery of your computer from running down while setting it up.

1. Insert the supplied Setup disk into your computer's floppy disk drive.
2. Double-click the "My computer" icon on the screen and then double-click the "A:" (depending on the floppy disk drive).
3. Double-click the "Setup.exe".

"Setup" window appears.



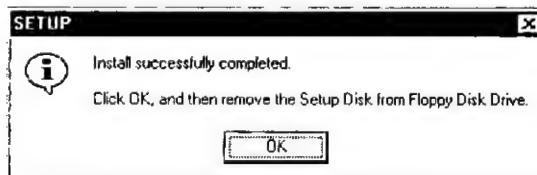
Setup Your Computer

4. Click the “Device driver” and then click **OK.**

Start installing and when it finishes next window appears like below.

Note:

- You can install the Help File, if you click on the “Help file”.



5. Click **OK and then remove the Setup disk.**

6. Connect the drive to your computer.

Follow the steps from ② to ④ at the “Connection”. (☞ P. 20)

“KME CD-ROM11 USB device driver” and

“KME CD-ROM11 USB Adapter” will appear in turn.

When the two of them disappear then the installation is completed.

Notes:

- The power of the drive is automatically turned on/off when the USB cable is inserted/removed.
- If the window does not appear at the Step 6 instead of the “Add New Hardware Wizard” window. Follow the instructions on the screen.

■ How to uninstall the Device Driver

Remove the USB cable from your computer and run the “Setup.exe” of the Setup disk. Click the “Uninstall Device driver and Help file” and then click **OK**.

Confirmation of proper driver installation

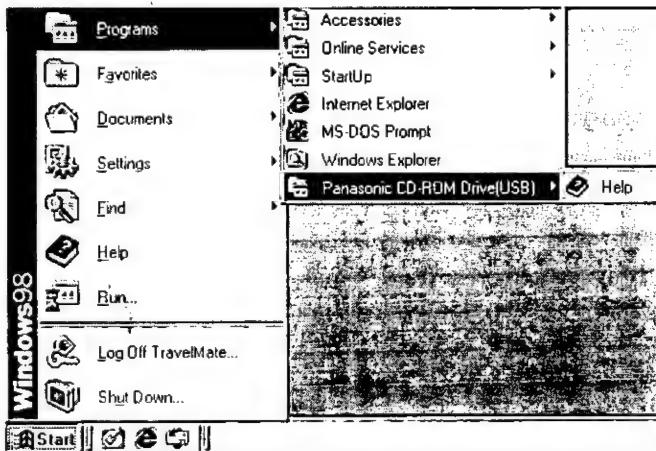
1. Double-click the "My computer" icon, before inserting a disk in the drive.

- If the "CD-ROM drive" icon () is displayed, the driver has been installed properly.
- If the "CD-ROM drive" icon () is not displayed, please refer to the "Troubleshooting" (☞P. 27-29).

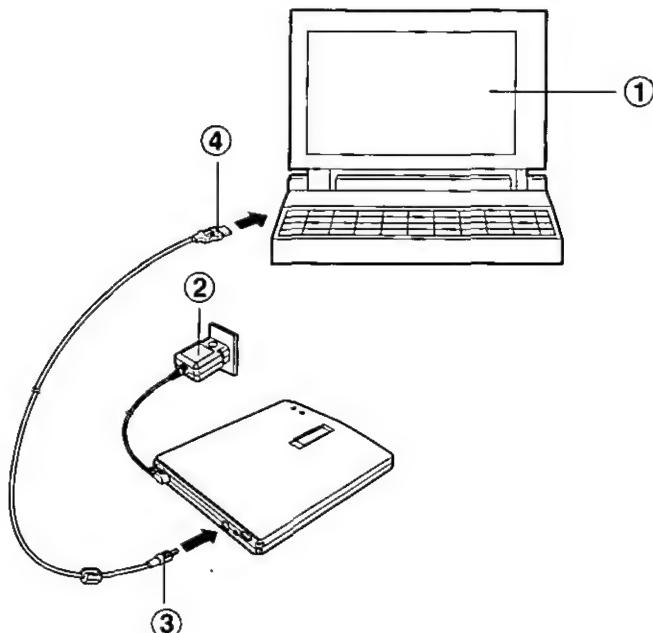
Viewing the "Help" File

Install the "Help" file as the same way to the Device Driver.

1. Click **Start** and then point to "Programs".
2. Point to "Panasonic CD-ROM Drive (USB)" and then click "Help".



Connection



- ① Start your Windows 98 / Windows 2000.**
- ② Connect the AC adaptor to the drive.**
- ③ Connect the supplied USB Cable to the Interface Connector [I/F] of the drive.**
- ④ Connect another side of the supplied USB Cable to the USB Connector of your computer.**

The drive turns on automatically and the POWER indicator is lit.

Notes:

- The power of the drive is automatically turned on/off when your computer is turned on/off.
- If you wish to use the USB interface power, turn off the power mode switch (P. 15).

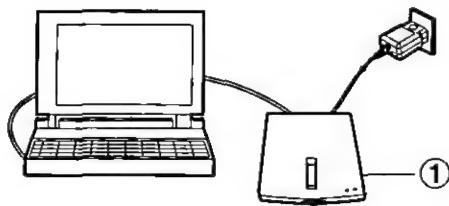
Notes:

- Use only the supplied USB cable with the drive. Other cables could damage the drive or your computer.
- If the drive is not going to be used for an extended period, unplug the AC adaptor from the AC outlet to reduce power consumption. (Approximately 1 W of power is consumed when the drive is OFF and the AC adaptor is connected with 120 V outlet.)
- When you use the drive with the supplied AC adaptor, the mains socket-outlet should be near the drive and should be easily accessible.
- The AC adaptor is universal voltage. However, it is designed for use only in the country where it was purchased.
- Connect the USB cable directly to your computer's USB port.
We will not guarantee to connect through the USB hub.

POWER On / Off

When you use the drive for the first time. Make sure that connection is done properly.

(Example)



① Turn on the drive by sliding its POWER switch.

Caution:

- When the BUSY indicator (amber) is lit or blinking, observe the following precautions since data is being read from a media.
 - Do not open the disc cover.
 - Do not disconnect the USB cable.
 - Do not slide the POWER switch of the drive.
 - Do not disconnect the AC adaptor.

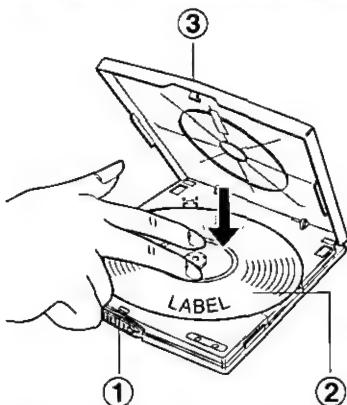
Otherwise, your computer may hang up. If this happens, restart your computer.

Note:

- If you turn off the drive while your computer and the drive are connected, your computer will not be recognized the drive. To use the drive again turn on the drive or disconnect the USB cable and connect it again.

Inserting / Removing a Disc

Inserting a disc



① Slide the OPEN lever to open the disc cover and then raise it.

② Place a disc onto the disc spindle.
Press on the center of a disc until it locks onto the disc spindle.

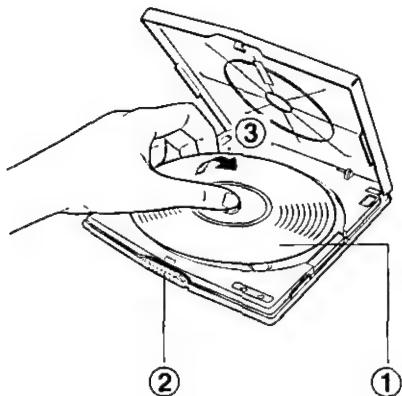
③ Close the disc cover.

Caution:

- Insert a disc firmly until it locks onto the spindle and then close the disc cover, or the disc may fall off the spindle and get damaged.

Operation

Removing a disc



① Make sure that the disc is not spinning.

② Slide the OPEN lever to open the disc cover and then raise it.

③ Carefully remove the disc by lifting it.

Press on the disc spindle, then lift the disc by holding its edge.

Caution:

- Close the application, if you are using the drive with your computer and make sure that the BUSY indicator (amber) is not blinking or lit before opening the disc cover.

Reading from a CD

Playing a CD-ROM

To use a CD-ROM, refer to the manual or "README" file included on the CD-ROM.

- Some types of CD-ROMs [game CD-ROM with audio track, CD Extra, Portfolio CD (Photo CD), etc.] allow you to listen to the sound or music through the headphones/external speaker system (not supplied) with the LINE OUT jack of the drive. Connect the headphones/external speaker system (not supplied) with the LINE OUT jack of the drive. If the LINE IN jack is available on the sound system of your computer, make a connection between the LINE IN jack of your computer and LINE OUT jack of the drive using an audio cable with ø 3.5 mm mini stereo plug at both ends. The cable can be obtained at mass electronics stores.

Playing an audio CD

You can operate an audio CD on your computer using an audio CD control software. Sound can be heard through the LINE OUT jack.

- To listen to the sound or music of an audio CD, connect the headphones/external speaker system (not supplied) with the LINE OUT jack of the drive. If the LINE IN jack is available on the sound system of your computer, make a connection between the LINE IN jack of your computer and LINE OUT jack of the drive using an audio cable with ø 3.5 mm mini stereo plug at both ends. The cable can be obtained at mass electronics stores.

Insertion / Removal of the USB Cable

■ Users for Windows 98

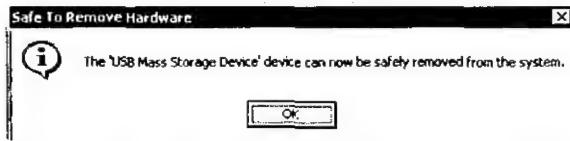
The supplied USB cable supports the Hot Swap function. With your computer turned on, you can insert/remove the USB cable without fear of hardware damage.

■ Users for Windows2000

1. Double-click “Unplug / Eject” icon  in task bar.
“Unplug” or “Eject Hardware” window appears.
2. Click on the “Display device components”.



3. Select “USB Mass Storage Device” linked with “MATSHITA KME CD-ROM11 USB Device” and click **Stop**.
4. Click **OK**.



5. Click **OK**.
6. Remove the USB cable.

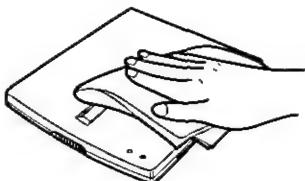
Maintenance

Caution:

- Do not use solvents such as benzine, thinner, alcohol, record cleaners or anti-static spray.

■ When the outside of the drive is dirty:

Clean the outside of the drive with a soft, dried cloth.



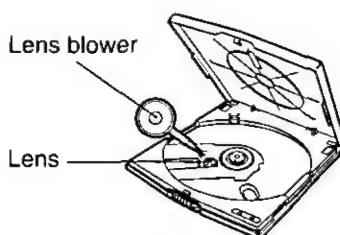
■ When a disc is dirty:

Wipe from the center to the edge with a soft, dried cloth.



■ When the lens is dirty:

Clean the lens with a commercial lens blower.



Troubleshooting

If trouble occurs, check the following points before returning the drive for service.

Trouble	Possible Cause	Solution
Your computer does not recognize the drive, or does not function properly.	The Auto Protect function of AC adaptor is working.	Disconnect the AC adaptor and connect it again after few minutes.
	Your computer has not been setup yet.	Set up your computer. (install the device drivers, if it is necessary.) (☞ P. 17).
	The USB cable is not connected to the drive or to your computer properly.	Properly connect the USB cable (☞ P. 20).
	The USB cable pin is bent or broken.	Consult your dealer (or contact Panasonic Service Center at 1-800-PANA-SYS for users in continental United States).
	The drive is off.	<ul style="list-style-type: none">● Turn on the drive and restart your computer(☞ P. 22).● If you use the drive with the USB interface power, confirm the "Setting the Power Mode" (☞ P. 15).
	Operating System is not matched.	The drive works only with Windows 98 / Windows 2000.

(continued)

Troubleshooting

Trouble	Possible Cause	Solution
Your computer does not recognize the drive, or does not function properly.	<p>For Windows 98 users</p> <p>Confirm the "Device Manager" to see if the drive has been installed correctly.</p> <p>How to view the Device Manager:</p> <ol style="list-style-type: none">1. Right-click the "My Computer" icon at the desktop and then click the "Properties".2. Double-click the "Device Manager" tab. <p>After installation, connect the USB cable to your computer and open the "Device Manager" window. You should have entries in the "Device Manager" similar to below.</p>  <p>If the "Device Manager" window does not appear like above or the symbol  has been shown on a device then select it and click Remove. After that uninstall and then install the driver by the supplied Setup disk. After you have done all the steps but still cannot use this drive. Consult your dealer (or contact Panasonic Service Center at 1-800-PANA-SYS for users in continental United States).</p>	

Trouble	Possible Cause	Solution
The drive, AC adaptor or interface card is warm.		This is not abnormal. If they become hot, consult your dealer.
Sound skips, or data cannot be read.	Disc is placed with the label side facing down.	Place the disc with the label side facing up (☞ P. 23).
	CD without  or  mark is used.	Use the CD marked with  or  .
	Disc or the lens of the drive may have become dirty.	Clean the disc or the lens of the drive (☞ P. 26).
	Disc is damaged.	Replace with another disc.
	Dust such as a hair lay on the disc spindle.	Clean the disc spindle (☞ P. 26).
	The drive or/and disc are damp or moist, because the drive or/and disc may have been moved from a cold place to a warm place.	Remove the disc from the drive and do not use the drive and disc for about 1 hour.

Specifications

Operating Environment (under no damp or moist conditions):	Temperature: 5°C {41°F} to 35°C {95°F} Humidity: 20% to 85% RH
Storage Environment (Non-condensing):	Temperature: -20°C {-4°F} to 55°C {131°F} Humidity: 15% to 85 % RH
Dimensions:	130 (W) × 157 (D) × 16.5 (H) mm { 5.12" × 6.18" × 0.65" }
Mass (Weight):	Approx. 240 g { 8.5 oz. }
Power Sources:	<ul style="list-style-type: none">• Supplied AC Adaptor (KX-WZ701): 100-240 V, 50/60 Hz• Supplied USB Interface Power DC5V
Interface:	USB
Buffer Size:	128 kB
Data Transfer Rate*¹:	<ul style="list-style-type: none">• Using supplied AC adaptor: 795 kB/s (inner: 5.3X) to 900 kB/s (outer: 6X)• Using USB interface power: 390 kB/s (inner: 2.6X) to 900 kB/s (outer: 6X)
Access Time:	150 ms typical (The information is based on the test results measured 1/3 stroke by Panasonic test software)

*¹ Performance may vary based on computer specifications.

Power Consumption:	<ul style="list-style-type: none"> ● Using supplied AC adaptor : <table border="0"> <tr> <td>Playing CD-ROM:</td><td>Approx. 5.0 W</td></tr> <tr> <td>When the drive is off:</td><td>Approx. 1.0 W</td></tr> </table> <ul style="list-style-type: none"> ● Using USB interface power: Approx. 2.5 W 		Playing CD-ROM:	Approx. 5.0 W	When the drive is off:	Approx. 1.0 W		
Playing CD-ROM:	Approx. 5.0 W							
When the drive is off:	Approx. 1.0 W							
Compatible Format:	CD-DA (audio CD), VIDEO CD* ² , CD-i (movie)* ² , CD-ROM (Mode 1, Mode 2 Form 1), CD-ROM XA (Mode 2 Form 2), CD-TEXT* ⁴ Photo CD* ³ (Multisession is compatible), CD Extra CD-R* ⁵ , CD-RW* ⁵							
Error Rates:	<table border="0"> <tr> <td>Soft read errors</td> <td>Less than 10⁻⁹</td> </tr> <tr> <td>Hard read errors</td> <td>Less than 10⁻¹²</td> </tr> </table>		Soft read errors	Less than 10 ⁻⁹	Hard read errors	Less than 10 ⁻¹²		
Soft read errors	Less than 10 ⁻⁹							
Hard read errors	Less than 10 ⁻¹²							
Audio Performance:	LINE OUT jack							
USB Cable:	<table border="0"> <tr> <td>Cable length</td> <td>Approx. 900 mm (without the connector)</td> </tr> <tr> <td>Data transfer rate</td> <td>12 Mbit/s (MAX.)</td> </tr> <tr> <td>Mass {Weight}</td> <td>Approx. 35 g {1.2 oz.}</td> </tr> </table>		Cable length	Approx. 900 mm (without the connector)	Data transfer rate	12 Mbit/s (MAX.)	Mass {Weight}	Approx. 35 g {1.2 oz.}
Cable length	Approx. 900 mm (without the connector)							
Data transfer rate	12 Mbit/s (MAX.)							
Mass {Weight}	Approx. 35 g {1.2 oz.}							

*² Software required for viewing VIDEO CD and CD-i titles are not included.

*³ Software required for viewing Photo CD titles is not included.

*⁴ Software required for viewing information of CD TEXT titles is not included.

*⁵ CD-R and CD-RW are only for reading the data.

(This drive cannot be used for writing.)

Index

A

AC adaptor (supplied) 12, 20
Accessories 12
Audio CD control software 24

B

Buffer 30

C

CD-ROM 24, 31
Connecting AC adaptor (supplied) ... 20

D

Disc 11, 23
DC IN jack 14
Disc cover 13, 23
Device driver 17, 18

E

End-User License Agreement 6, 7

F

Features 8

I

Inserting a disc 23

L

LINE OUT jack 14, 24

M

Maintenance 26
MODE switch 14, 15

O

OPEN lever 13, 23

P

Part Names 13, 14
Playing an audio CD 24
Power On / Off 22
POWER mode 15
POWER switch 13, 22
Precautions 10, 11

R

Removing a disc 23

S

Setup disk 12, 17
Specification 30

T

Troubleshooting 27-29

U

USB cable 12, 25

W

Windows 98 16, 17, 20, 25
Windows 2000 16, 17, 20, 25

Appendix

FOR USERS IN CONTINENTAL UNITED STATES ONLY

Technical Support Calls

If you have read this manual and tried the troubleshooting procedures, and you are still having difficulty, please contact the store from which the unit was purchased.

Panasonic Document Imaging Company will repair this product with new or refurbished parts free of charge for one (1) year from the date of purchase.

You may also call the technical support telephone number (24 hour, 7 day/week automated technical support. Live technical support M-F, 9 am-5 pm EST).

**The technical support number is: 1-800-PANA-SYS
(1-800-726-2797)**

Software drivers are sometimes updated. You can download the latest or new setup disk via your modem.

Internet: <http://www.panasonic.com>

BBS:@ 201-863-7845

This product is designed for use only in the country where it was purchased.

**Panasonic Document Imaging Company
Division of Matsushita Electric Corporation of America
Two Panasonic Way, Secaucus, New Jersey 07094**